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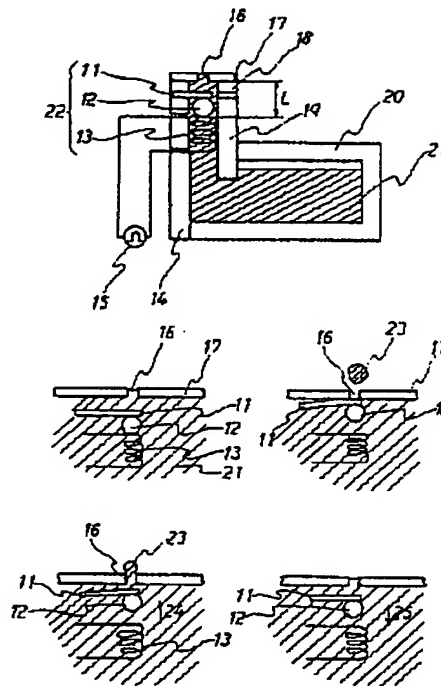
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TITLE : INK JET HEAD



ABSTRACT : PURPOSE: To enhance an energy efficiency and productivity and stabilize ink discharge characteristics by filling spaces among a nozzle forming member and electromagnetic coils with ink and mounting a permanent magnet and a return spring, which are laminated to each other, at the end part of each electromagnetic coil.

CONSTITUTION: Each of electromagnets 13 is arranged independently so as to be opposed to each of nozzle openings 16, respectively, and a permanent magnet 12 is usually pressed to the upper end of each electromagnetic coil 13 due to the spring force of a return spring 11. Ink 21 is supplied from the exterior of a frame 20 and filled up to nozzle openings 16. When a drive voltage is applied to the electromagnetic coil 13 to form a magnetic field, the permanent magnet 12 receives a repulsive force, and the permanent magnet 12 and return spring 11 are displaced in an arrow direction 24 in the ink to approach or impinge against a nozzle forming member 17, whereby an ink droplet 23 is discharged toward a recording medium 1. The extent of displacement of the permanent magnet 12 and return spring 11 can be set arbitrarily according to the adjustment of a drive voltage applied to the electromagnetic coil 13, a weight of the permanent magnet 12 and a spring force of the return spring 11. Therefore, the appropriate extent of displacement that is sufficient to discharge ink can be easily set.

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